

WE CLAIM:

1. A loader assembly comprising:
  - (a) a left boom arm comprising:
    - (i) a left tower constructed for attachment to a bracket on a motor vehicle;
    - (ii) a left loader arm comprising a first end rotatably attached to the left tower, a second end constructed for attaching to an attachment, and a left lift cylinder/attachment cylinder rotation pin;
    - (iii) a left lift cylinder comprising a first end rotatably attached to the left tower, and a second end rotatably attached to the left loader arm at the left lift cylinder/attachment cylinder rotation pin; and
    - (iv) a left attachment cylinder comprising a first end rotatably attached to the left loader arm at the left lift cylinder/attachment cylinder rotation pin, and a second end constructed for attaching to an attachment; and
  - (b) a right boom arm comprising:
    - (i) a right tower constructed for attachment to a bracket on a motor vehicle;
    - (ii) a right loader arm comprising a first end rotatably attached to the right tower, a second end constructed for attaching to an attachment, and a right lift cylinder/attachment cylinder rotation pin;
    - (iii) a right lift cylinder comprising a first end rotatably attached to the right tower, and a second end rotatably attached to the right loader arm at the right lift cylinder/attachment cylinder rotation pin; and
    - (iv) a right attachment cylinder comprising a first end rotatably attached to the right loader arm at the right lift cylinder/attachment cylinder rotation pin, and a second end constructed for attaching to an attachment;

2. A loader assembly according to claim 1, further comprising a tower subframe extending from the left tower to the right tower.
3. A loader assembly according to claim 1, further comprising a stabilizing arm extending between the left loader arm and the right loader arm.
4. A loader assembly according to claim 2, wherein the tower subframe comprises a left tower subframe arm, a right tower subframe arm, and a tower subframe mounting arm extending between the left tower subframe arm and the right tower subframe arm.
5. A loader assembly according to claim 4, wherein the tower subframe mounting arm is constructed for attachment to a front bracket on a motor vehicle.
6. A loader assembly according to claim 4, wherein the tower subframe further comprises a tower subframe support.
7. A loader assembly according to claim 6, further comprising a plurality of hydraulic lines extending between the left tower and the right tower via the left tower subframe arm, the tower subframe support, and the right tower subframe arm.
8. A loader assembly according to claim 2, further comprising a plurality of hydraulic lines extending between the left tower and the right tower via the tower subframe.
9. A loader assembly according to claim 4, wherein the tower subframe further comprises a front bracket locking assembly constructed to hold the tower subframe mounting arm in place within a front bracket on a motor vehicle.

10. A loader assembly according to claim 1, further comprising an attachment and wherein the left loader arm, the left attachment cylinder, the right loader arm and the right attachment cylinder are attached to the attachment.

11. A loader assembly according to claim 10, wherein the attachment comprises a bucket.

12. A loader assembly according to claim 10, further comprising a left linkage between the left attachment cylinder and the attachment, and a right linkage between the right attachment cylinder and the attachment.

13. A loader assembly comprising:

(a) a left boom arm comprising a left tower constructed for attaching to a bracket on a tractor, and a left loader arm comprising a first end rotatably attached to the left tower and a second end constructed for attaching to an attachment;

(b) a right boom arm comprising a right tower constructed for attaching to a bracket on a tractor, and a right loader arm comprising a first end rotatably attached to the right tower and a second end constructed for attaching to an attachment; and

(c) a tower subframe extending between the left tower and the right tower, the tower subframe constructed to contain a plurality of hydraulic lines therein extending between the left boom arm and the right boom arm.

14. A loader assembly according to claim 13, wherein the loader assembly comprises a plurality of hydraulic lines extending through the tower subframe between the left tower and the right tower.

15. A loader assembly according to claim 13, wherein the tower subframe comprises a left tower subframe arm extending from the left tower, a right tower subframe arm extending from the right tower, a tower subframe mounting arm extending between the left tower subframe arm and the right tower subframe arm, and a

tower subframe support extending between the left tower subframe arm and the right tower subframe arm.

16. A loader assembly according to claim 15, further comprising a plurality of hydraulic lines extending through the left tower subframe arm, the tower subframe support, and the right tower subframe arm.

17. A loader assembly according to claim 16, wherein the plurality of hydraulic lines comprises a pair of hydraulic lines for operating a lift cylinder and a pair of hydraulic lines for operating an attachment cylinder.

18. A loader assembly according to claim 15, wherein the tower subframe further comprises a front bracket locking assembly constructed to hold the tower subframe mounting arm in place within a front bracket on a motor vehicle.

19. A combination motor vehicle and loader assembly comprising:  
a motor vehicle having a left side bracket attached to the left side of the motor vehicle, a right side bracket attached to the right side of the motor vehicle, and a front bracket attached to the front of the motor vehicle, and a loader assembly attached to the left side bracket, the right side bracket, and the front bracket, wherein the loader assembly comprising:

(a) a left boom arm comprising:

(i) a left tower attached to the left bracket;

(ii) a left loader arm comprising a first end rotatably attached to the left tower, a second end constructed for attaching to an attachment, and a left lift cylinder/attachment cylinder rotation pin;

(iii) a left lift cylinder comprising a first end rotatably attached to the left tower, and a second end rotatably attached to the left loader arm at the left lift cylinder/attachment cylinder rotation pin; and

- (iv) a left attachment cylinder comprising a first end rotatably attached to the left loader arm at the left lift cylinder/attachment cylinder rotation pin, and a second end constructed for attaching to an attachment; and
- (b) a right boom arm comprising:
  - (i) a right tower attached to the right bracket;
  - (ii) a right loader arm comprising a first end rotatably attached to the right tower, a second end constructed for attaching to an attachment and a right lift cylinder/attachment cylinder rotation pin;
  - (iii) a right lift cylinder comprising a first end rotatably attached to the right tower, and a second end rotatably attached to the right loader arm at the right lift cylinder/attachment cylinder rotation pin; and
  - (iv) a right attachment cylinder comprising a first end rotatably attached to the right loader arm at the right lift cylinder/attachment cylinder rotation pin, and a second end constructed for attaching to an attachment.

20. A combination motor vehicle and loader assembly according to claim 19, wherein the loader assembly further comprises a tower subframe extending from the left tower to the right tower.

21. A combination motor vehicle and loader assembly according to claim 20, wherein the tower subframe is attached to the front bracket.

22. A combination motor vehicle and loader assembly according to claim 19, further comprising a stabilizing arm extending between the left loader arm and the right loader arm.

23. A combination motor vehicle and loader assembly according to claim 20, wherein the tower subframe comprises a left tower subframe arm, a right tower subframe arm, and a tower subframe mounting arm extending between the left tower subframe arm and the right tower subframe arm.

24. A combination motor vehicle and loader assembly according to claim 23, wherein the tower subframe further comprises a tower subframe support.

25. A combination motor vehicle and loader assembly according to claim 24, further comprising a plurality of hydraulic lines extending between the left tower and the right tower via the left tower subframe arm, the tower subframe support, and the right tower subframe arm.

26. A combination motor vehicle and loader assembly according to claim 23, wherein the tower subframe further comprises a front bracket locking assembly constructed to hold the tower subframe mounting arm in place within the front bracket.

27. A combination motor vehicle and loader assembly according to claim 19, further comprising an attachment and wherein the left loader arm second end and the right loader arm second end are attached to the attachment.

28. A loader assembly according to claim 27, wherein the attachment comprises a bucket.

29. A method for operating a loader assembly comprising:

(a) driving a tractor into the loader assembly provided in a storage position until a left bracket and a right bracket on a tractor engage a left tower and a right tower on the loader assembly, wherein hydraulic lines extend within a tower subframe between the left tower and the right tower;

(b) connecting tractor hydraulic lines to loader hydraulic lines to power hydraulic cylinders on the loader assembly; and

(c) operating at least a portion of the hydraulic cylinders to cause the tower subframe to engage a front bracket on the tractor.